P.002

Applicants: Serial No.:

SMOLYAR, Lev, ct al.

Filed:

09/966,753 October 1, 2001

Page 2

RECEIVED CENTRAL FAX CENTER

DEC 1 4 2007

THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the Application. Please amend the claims to read as follows and cancel without prejudice or disclaimer the claims marked as canceled:

1. (Currently Amended) A rake receiver comprising:

a direction metric determiner which generates direction metrics of each of a set of possible directions of joint movement of at least two fingers of a finger block of the rake receiver, wherein said at least two fingers of said finger block jointly track at least two paths of a multipath channel, and wherein said at least two paths have a time separation that is less than approximately 1.5 times a chip duration:

- a metric selector which selects one of said direction metrics according to a predetermined criterion; and
- a finger adjuster which moves the fingers of said finger block in the directions indicated by said selected direction metric.
- 2. (Original) A receiver according to claim 1, wherein said selected direction metric is the maximal direction metric.
- 3. (Original) A receiver according to claim 1, wherein said finger adjuster moves the fingers of said finger block only if said selected direction metric is the maximal direction metric and exceeds a comparison direction metric by at least a predetermined threshold.
- 4. (Original) A receiver according to claim 1, wherein said finger adjuster includes a redefiner which redefines finger blocks once said fingers have been moved.
- 5. (Original) A receiver according to claim 1, wherein said finger block is formed of two fingers.
- 6. (Original) A receiver according to claim 5, wherein said determiner generates said direction metrics for five different directions of joint movement.
- 7. (Original) A receiver according to claim 5, wherein said determiner generates said direction metrics for six different directions of joint movement.
- 8. (Original) A receiver according to claim 5, wherein said determiner generates said direction metrics for nine different directions of joint movement.

Applicants:

SMOLYAR, Lev, ct al.

Serial No.: Filed:

09/966,753 October 1, 2001

Page 3

- 9. (Original) A receiver according to claim 1, wherein said finger block is formed of two closely spaced fingers.
- (Original) A receiver according to claim 9, wherein said closely spaced fingers are 7/8
 chip apart.
- (Original) A receiver according to claim 1, wherein said finger block is formed of three fingers.
- 12. (Original) A receiver according to claim 1, wherein delays between fingers are set to be no smaller than 7/8 chip.
- 13. (Original) A receiver according to claim 1, wherein said direction metrics are based on power estimation.
- 14. (Currently Amended) An article comprising a computer readable storage medium having encoded thereon instructions, that, when executed by a computing platform, cause the computing platform to:

generate direction metrics of each of a set of possible directions of joint movement of at least two fingers of a finger block of a rake receiver, wherein said at least two fingers of said finger block jointly track at least two paths of a multipath channel, and wherein said at least two paths have a time separation that is less than approximately 1.5 times a chip duration,

select one of said direction metrics according to a predetermined criterion, and to move the fingers of said finger block in the directions indicated by said selected direction metric.

- 15. (Original) The article according to claim 14, wherein said selected direction metric is the maximal direction metric.
- 16. (Previously Presented) The article according to claim 15, wherein the fingers of said finger block are adjusted only if said selected direction metric is the maximal direction metric and exceeds a comparison direction metric by at least a predetermined threshold.
- 17. (Original) The article according to claim 14, further having stored instructions which cause the computing platform to redefine the finger blocks.
- 18. (Original) The article according to claim 14, wherein said finger block is formed of two fingers.

P.004

Applicants:

SMOLYAR, Lev, et al.

Serial No.: Filed:

09/966,753 October 1, 2001

Page 4

- 19. (Original) The article according to claim 18, wherein said direction metrics are generated for five different directions of joint movement.
- 20. (Original) The article according to claim 18, wherein said direction metrics are generated for six different directions of joint movement.
- 21. (Original) The article according to claim 18, wherein said direction metrics are generated for nine different directions of joint movement.
- 22. (Original) The article according to claim 14, wherein said finger block is formed of two closely spaced fingers.
- 23. (Original) The article according to claim 22, wherein said closely spaced fingers are 7/8 chip apart.
- 24. (Original) The article according to claim 14, wherein said finger block is formed of three fingers.
- 25. (Original) The article according to claim 14, wherein delays between fingers are set to be no smaller than 7/8 chip.
- 26. (Previously Presented) The article according to claim 14, wherein said generating of direction metrics includes the step of time averaging said direction metrics by summing consecutive direction metrics.
- 27. (Original) The article according to claim 26, wherein said step of time averaging uses a forgetting factor.
- 28. (Original) The article according to claim 14, wherein said direction metrics are based on power estimation.
- 29. (Canceled)
- 30. (Currently Amended) A method comprising:

forming a finger block of at least two fingers of a rake receiver, wherein said at least two fingers of said finger block jointly track at least two paths of a multipath channel, and wherein said at least two paths have a time separation that is less than approximately 1.5 times a chip duration; and

jointly tracking the fingers of said finger block by:

generating direction metrics of each of a set of possible directions of joint movement of the fingers of said finger block;

Applicants: Serial No.:

SMOLYAR, Lev, et al.

Senal N Filed: 09/966,753 October 1, 2001

Page 5

sclecting one of said direction metrics according to a predetermined criterion; and moving the fingers of said finger block in the directions indicated by said selected direction metric.